

FIG. 1

# MuniAuction

The First Municipal Bond Auction Website



FIG. 2

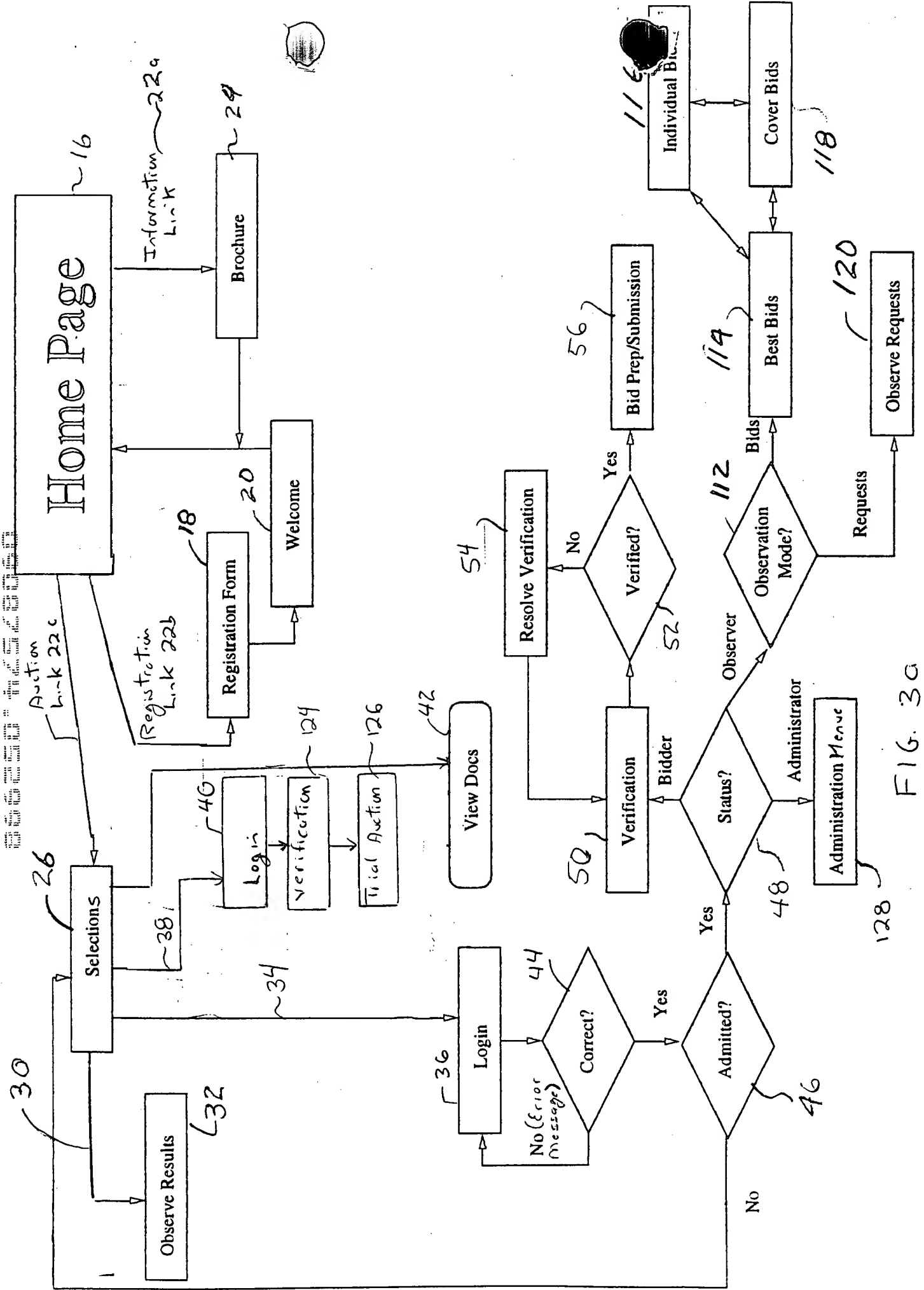


FIG. 30

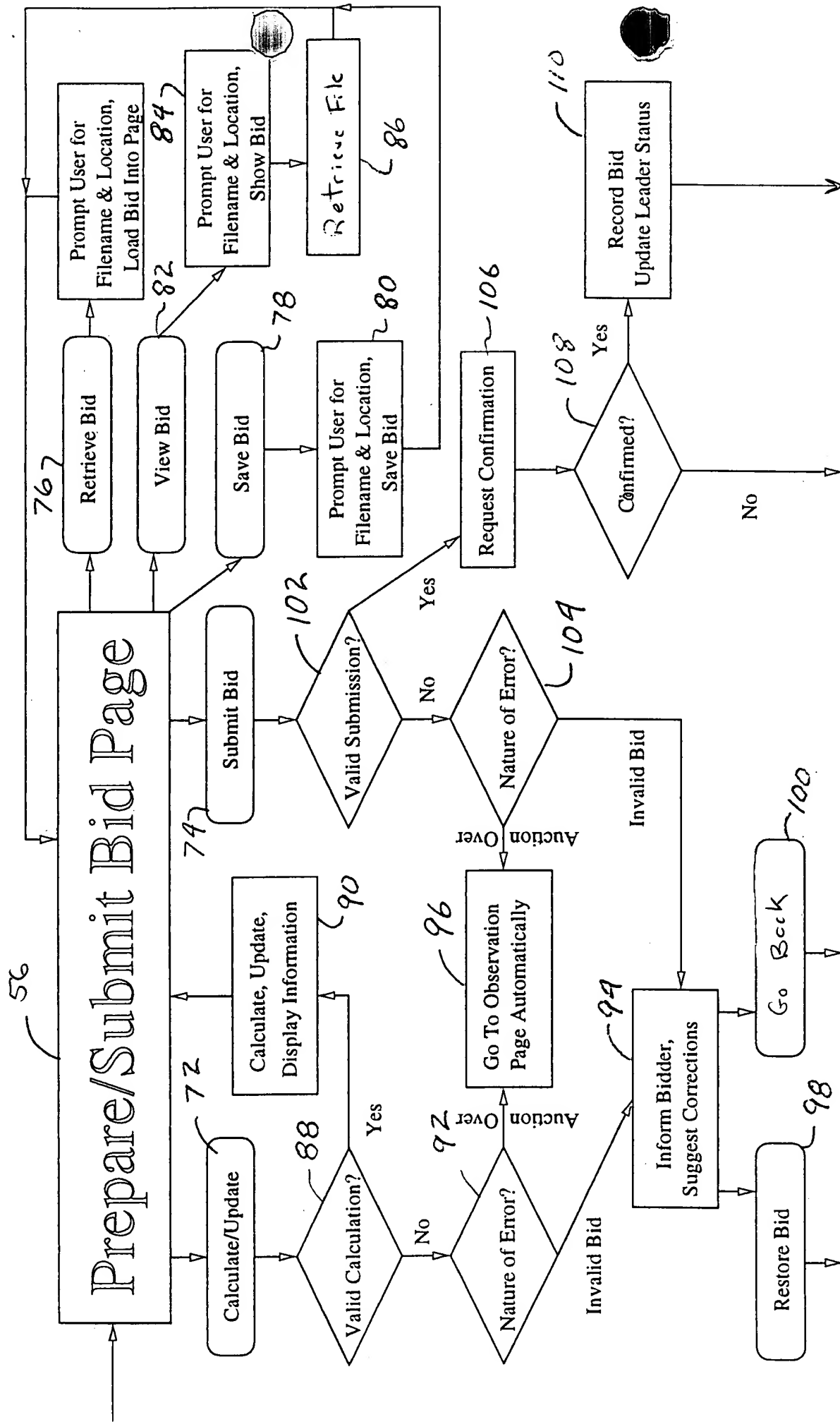


FIG. 3b



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**REGISTRATION QUESTIONS** (Fields displayed in **bold** below are required.)

**FIRST NAME:**

**LAST NAME:**

**ORGANIZATION:**

**ADDRESS (1st Line):**

**ADDRESS (2nd Line):**

**CITY:**

**STATE:**

**ZIP:**

**TELEPHONE:**

**TELEFAX:**

**E-MAIL:**

**MOTHER'S MAIDEN NAME:**  (for security reasons only, e.g., verify your identity by phone)

FIG. 4

# Selections

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Issuer	State	Description	Size*	Auction Date*	Start Time*
City of Trial Auction (All-or-None)	OR	Limited Tax Revenue Bonds 1998 Series A	\$29,000,000	Any Day	Any Time
(Amendments modified 4/20/98 @10:14 pm)					
<input type="button" value="Enter Auction"/> <input type="button" value="View Notice of Sale"/> <input type="button" value="View Amendments"/> <input type="button" value="View POS"/>					
City of Trial Auction (Maturity-by-Maturity)	OR	Limited Tax Revenue Bonds 1998 Series A	\$29,000,000	Any Day	Any Time
(Amendments modified 4/20/98 @10:14 pm)					
<input type="button" value="Enter Auction"/> <input type="button" value="View Notice of Sale"/> <input type="button" value="View Amendments"/> <input type="button" value="View POS"/>					
City of Portland (All-or-None)	OR	Limited Tax Revenue Bonds 1998 Series A	\$29,000,000	4/21/98	11:30 am EDT
(Amendments modified 4/20/98 @10:14 pm)					
<input type="button" value="Observe Results"/> <input type="button" value="View Notice of Sale"/> <input type="button" value="View Amendments"/> <input type="button" value="View POS"/> <input type="button" value="Request Admission"/>					
City of Portland (Maturity-by-Maturity)	OR	Limited Tax Revenue Bonds 1998 Series A	\$29,000,000	4/21/98	11:30 am EDT
(Amendments modified 4/20/98 @10:14 pm)					
<input type="button" value="Observe Results"/> <input type="button" value="View Notice of Sale"/> <input type="button" value="View Amendments"/> <input type="button" value="View POS"/> <input type="button" value="Request Admission"/>					

Go to: [MuniAuction Home Page](#), [Rules](#) (modified 4/16/98 @5:01 pm), [Instructions](#),  
[Reminders](#), [Results](#)

FIG 5

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**Observe Auction: Portland.1998A.MBM**  
**MBM Best Bids**

Auction Date	Auction Type	Start	End	Time Of Last Update	Auction Status
Tue., Apr 21, 1998	MBM	11:30 am	12:00 pm	11:13:05 am EDT	Over

\$29,000,000  
City of Portland, Oregon  
Limited Tax Revenue Bonds  
1998 Series A

<b>Best MBM TIC:</b> <b>4.9574 %</b> <b>(Not Winner)</b>	<b>Best AON TIC:</b> <b>4.9526 %</b> <b>(Winner )</b>	<b>Best AON Bidder:</b> <b>Salomon Smith Barney</b> <b>(Winner )</b>
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Refresh

**Principal**

Due	Amount*	Coupon	Price	Best Yield	Best MBM Bidder
April 1, 2000	\$1,000,000	3.900%	99.703%	4.063%	U.S. Bancorp Securities, Inc.
April 1, 2001	\$1,040,000	4.000%	99.578%	4.155%	U.S. Bancorp Securities, Inc.
:	:	:	:	:	:
April 1, 2016	\$2,050,000	5.000%	98.004%	5.172%	ADVEST INC.
April 1, 2017	\$2,160,000	5.100%	98.710%	5.208%	U.S. Bancorp Securities, Inc.
April 1, 2018	\$2,270,000	5.125%	99.032%	5.203%	CIBC-Oppenheimer

Refresh

**Click below to see other bidder results**

LEBE-DS	WILL-MD	PRAG-RM	BELL-ER	GEOR-KD	HUTC-RD	FIRS-RE
FIDE-DD	ADVE-JL	INTE-SF	RAYM-JR	A.G.-GH	SEAT-MA	U.S.-KS
MORG-TB	COMM-CB	EDWA-JC	ARTE-BW	CIBC-WH	Cover Bids	Bid Summary

Go [Notice of Sale](#), [Amendments](#) (modified 4/20/98 @ 10:14 pm), [POS](#), [Rules](#) (modified to: 4/16/98 @ 5:02 pm) [Instructions](#), [Reminders](#), [Selections](#), [Results](#)  
Exit  
to: [MuniAuction Home Page](#)

FIG. 6

# Login

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Auction Name: AON.TRIAL.AUCTION.SeriesA

Please go to Registration page if you have not yet registered with MuniAuction.

Enter your ID number:   
Enter your password:

Note: Password is Case-Sensitive.

FIG. 7

**ENTER**

☐ as a Bidder  
☐ as an Observer

Exit to: MuniAuction Home Page

## Acknowledgement

In order to view this POS, you must first acknowledge that you are eligible to bid (i.e., you represent either a bank or NASD registered broker-dealer).

**I Am Eligible**

**I Am Not Eligible**

*This shall not constitute a solicitation or offer to bid or purchase these securities to such persons or in such jurisdictions to which such offerings or solicitations are not permitted. An offer or solicitation shall be made only by means of the Preliminary Official Statement.*

Back to: **Selections Page**

FIG. 8



# Verification

← 50

Your name is **Edward Pencoske**.  
Your firm is **Thorp Reed & Armstrong**.  
This auction is **AON.TRIAL.AUCTION.1998A**.  
This auction is an **All-Or-None** auction.

Please verify that the above information is correct.

☐ YES ☐ NO

Have you read the Notice of Sale and related Amendments (modified 4/20/98 @10:14 pm), if any, and do you agree to abide by the terms and conditions?

☐ YES ☐ NO

Have you read the Preliminary Official Statement?

☐ YES ☐ NO

Have you read the Rules of MuniAuction (modified 4/16/98 @5:01 pm) and do you agree to abide by them?

☐ YES ☐ NO

Enter Auction

Go Notice of Sale, Amendments (modified 4/20/98 @10:14 pm), POS, Rules (modified to: 4/16/98 @5:01 pm) Instructions, Reminders, Selections, Results

Exit  
to: MuniAuction Home Page

FIG. 9

# Auction

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Auction Date	Auction Type	Start	End	Time Of Last Update	Auction Status
Mon., Feb 23, 1998	MBM	9:30 am	10:00 am	3:10:16 pm	Over

\$91,760,000<sup>\*</sup>  
The Pittsburgh Water and Sewer Authority, Pennsylvania  
Water and Sewer System First Lien Revenue Bonds,  
Series A of 1998

Name of firm submitting bid: MuniAuction, Inc.

This auction is competing with PittsburghWaterAndSewer.SeriesA.AON.

72, 70, 74, As of 3:10:16 pm, bids have been submitted for all maturities.

<b>Calculate/Update</b>		<b>IMPORTANT:</b> Bidders must click the "Calculate/Update" button frequently during auction to update "Time of Last Update". Also, clicking "Calculate/Update" does not result in bid submission.				<b>Submit Bid</b>	
<b>68</b> Due	<b>66</b> Principal Amount*	Coupon	Enter Either:		<b>70</b> Your Status	<b>76</b> Submitted Cpn-PP-YTM	
			Purchase Price	OR	Yield-to-Maturity		
September 01, 2017	\$8,275,000	%	%	OR	%	Not Winner	
September 01, 2018	\$8,695,000	%	%	OR	%	Not Winner	

September 01, 2025	\$12,370,000	%	%	OR	%	Not Winner	
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<b>IMPORTANT:</b> Bidders must click the "Calculate/Update" button frequently during auction to update "Time of Last Update". Also, clicking "Calculate/Update" does not result in bid submission.	
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Go to: [Notice of Sale, Amendments](#) (modified 2/20/98 at 11:23 am), [POS, Rules](#) (modified 2/2/98 at 11:40 am) [Instructions](#), [Reminders](#), [Selections](#)  
Exit to: [MuniAuction Home Page](#)

FIG. 10

# Auction

56

Auction Date	Auction Type	Start	End	Time Of Last Update	Auction Status
Mon., Feb 23, 1998	AON	9:30 am	10:00 am	3:08:28 pm	Over

\$91,760,000\*  
The Pittsburgh Water and Sewer Authority, Pennsylvania  
Water and Sewer System First Lien Revenue Bonds,  
Series A of 1998

Name of firm submitting bid: MuniAuction, Inc.

Purchase Price: \$  
(not to be less than \$89,466,000.00)

Your TIC: NO BID Your Status: Not Winner

703 This auction is competing with PittsburghWaterAndSewer.SeriesA.MBM.

As of 3:08:28 pm, there has been at least one all-or-none bid submitted in this auction.

72

Calculate/Update

74

Submit Bid

68

Due

66

Principal Amount\*

Serial/Sinker/Term

Coupon

Enter Either:

Reoffering Price

OR

Yield-to-Maturity

September 01, 2017	\$8,275,000	Serial	%	%	OR	%
September 01, 2018	\$8,695,000	Serial	%	%	OR	%
September 01, 2025	\$12,370,000	Serial	%	%	OR	%

IMPORTANT: Bidders must click the "Calculate/Update" button frequently during auction to update "Time of Last Update". Also, clicking "Calculate/Update" does not result in bid submission.

Go to: [Notice of Sale, Amendments](#) (modified 2/20/98 @11:23 am), [PDS, Rules](#) (modified 2/20/98 @11:40 am) [Instructions](#), [Reminders](#),  
[Selections](#)  
Exit to: [MuniAuction Home Page](#)

FIG. 11

# Error

Sorry. Your bid was invalid for the following reasons:

1. For the Sinking Fund redemptions maturing on September 01, 2022 you are not allowed to enter a yield.
2. For the Sinking Fund redemptions maturing on September 01, 2022 you have entered price or coupon values that are not identical to the values for the corresponding Term bonds maturing on September 01, 2023.
3. You specified bonds maturing on September 01, 2020 as Term bonds, but you did not specify bonds for the preceding maturity as Sinking Fund redemptions (i.e., "Sinker").
4. You specified bonds maturing on September 01, 2018 as Sinking Fund redemptions, but you did not specify the subsequent maturity as either Sinking Fund redemptions (i.e., 'Sinker') or Term bonds.

*To specify any maturity as a term bond maturity, you must specify one or more preceding maturities as Sinking Fund redemptions.*

5. For the bonds maturing on September 01, 2017 you entered a coupon less than 1.00%.
6. Your Purchase Price must not be less than \$89,466,000.00
7. For the bonds maturing on September 01, 2017 your coupon entry of 0% does not conform to the rules of the auction. Coupon entered must be non-zero.

To return to the Auction Page with your most recent inputs, click the BACK button below.

BACK

To restore the Auction Page to your last successfully submitted bid, click the Restore button below (Warning: If no bid has yet been successfully submitted, clicking the Restore button will return you to a blank Auction Page).

Restore

Go to: [Notice of Sale, Amendments](#) (modified 2/20/98 @ 11:23 am), [POS, Rules](#) (modified 2/20/98 @ 11:40 am) [Instructions](#), [Reminders](#), [Selections](#)

Exit to: [MuniAuction Home Page](#)

FIG. 12

# Confirmation

Auction Date	Auction Type	Start	End	Time Of Last Update	Auction Status
Any Day	AON			4:57:37 pm	

\$91,760,000<sup>\*</sup>  
AON Trial Auction (Series A), Pennsylvania  
Water and Sewer System First Lien Revenue Bonds,  
Series A of 1998

Name of firm submitting bid: MuniAuction, Inc.

Are you sure you want to submit the following bid?

No, Go Back

Yes, Submit Bid

Purchase Price: \$90,000,000.00

Your TIC: 6.0803 %

Due	Principal Amount*	Serial/Sinker/Term	Coupon	Price	Yield
Beginning of Term group					
September 01, 2017	\$8,275,000	Sinker	5.000%	100.000%	***
September 01, 2018	\$8,695,000	Sinker	5.000%	100.000%	***
September 01, 2019	\$9,140,000	Sinker	5.000%	100.000%	***
September 01, 2020	\$9,610,000	Sinker	5.000%	100.000%	***
September 01, 2021	\$10,105,000	Term	5.000%	100.000%	5.000%
End of Term group					
September 01, 2022	\$10,630,000	Serial	6.000%	100.000%	6.000%
Beginning of Term group					
September 01, 2023	\$11,180,000	Sinker	7.000%	100.000%	***
September 01, 2024	\$11,755,000	Sinker	7.000%	100.000%	***
September 01, 2025	\$12,370,000	Term	7.000%	100.000%	7.000%
End of Term group					

Go to: [Notice of Sale, Amendments](#) (modified 2/20/98 @11:23 am), [PQS, Rules](#) (modified 2/20/98 @11:40 am) [Instructions](#), [Reminders](#), [Selections](#)

Exit to: [MuniAuction Home Page](#)

# Administration

Auction Permissions: PittsburghWaterAndSewerSeriesA.AON

Observe All

Change Auction Permissions

Return to Menu

Admission Status	Allow Bid	Allow Obs	ID Number	Organization
Requested	<input type="checkbox"/>	<input type="checkbox"/>	MUNI-DV	MuniAuction, Inc.
Requested	<input type="checkbox"/>	<input type="checkbox"/>	SHOD-RO	The Shodor Education Foundation
	<input type="checkbox"/>	<input type="checkbox"/>	CMU-DH	CMU

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• • • •  
• • • •

	<input type="checkbox"/>	<input type="checkbox"/>	ONLI-KO	OnLine Partners
Requested	<input checked="" type="checkbox"/>	<input type="checkbox"/>	SHOD-MS	Fulcrum
	<input type="checkbox"/>	<input type="checkbox"/>	TEST-MT	Test, Inc.

• • • •

Change Auction Permissions

Return to Menu

FIG. 14

# Administration

## Create New Auction

Date of Auction: Month:  Day:  Year:   
 Start time:  End time:   
 Settlement Dates: Month:  Day:  Year:   
 Dated Dates: Month:  Day:  Year:   
 Date of First Interest Payment: Month:  Day:  Year:   
 First Optional Call Date: Month:  Day:  Year:   
 Good Faith Deposit: \$   
 Clearing Agent Fee:  cents per \$1,000 bond  
 Overnight Loan Charge:  cents per \$1,000 bond

Auction Type: ☒ Fixed Auction ☐ Live Auction

Options: ☐ All or None ☐ Minimum Allowable Purchase Price:  \$  
☐ Allow Serials/Share Terms ☐ Allow Serials only  
☐ Maturity-by-Maturity

☒ Display Best TIC/Yield and Status ☒ Display Status but Hide Best TIC/Yield  
☒ Hide Best TIC/Yield and Status

Auction Method: ☒ Coupon and Price ☐ Coupon and Yield  
☐ Coupon and Price or Yield

Competition: ☒ No Competition. This auction will compete with:  
☐ Bid Restrictions

Bid Restrictions:

Maximum Allowable Redefining Price:  %  
 Minimum Allowable Redefining Price:  %  
 Maximum Allowable Coupon:  %  
 Minimum Allowable Coupon:  %  
 Accounting Yields Required:   
 Accounting Yields Not Required:   
 Zero Coupon Allowed:   
 Zero Coupon Not Allowed:   
 Zero Coupon Required:   
 Total to Display:   
 No restrictions on coupons:   
 Coupons must be multiples of:  
 1/8th of 1%   
 1/4th of 1%   
 1/2th of 1%   
 1/8th of 1/32th of 1%   
 Allow All Bids   
 Allow Best Bid Only   
 Number of maturities to be offered:   
 Auction name:   
 Issuer:   
 County (if applicable):   
 State:   
 Auction description:

FIG. 15